



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.
SECTOR 9 — CHART INFORMATION

SECTOR 9

THE ARABIAN COAST—ADEN HARBOR TO RAS AL HADD

Plan.—This sector describes the Arabian coast along the N side of the Gulf of Aden from Aden Harbor (Bandar at Tawahi) to Ras al Hadd, the S entrance point of the Gulf of Oman. The descriptive sequence is from W to NE.

General Remarks

9.1 Winds—Weather.—In the Gulf of Aden, the Northeast Monsoon begins early in November; the steadiness of wind and weather offers a great contrast to the Southwest Monsoon. Winds from the ENE, and E prevail, turning SE near the entrance of the Red Sea.

In late December and early January, it frequently attains moderate gale force and may be accompanied by heavy rain.

During the remainder of January, February and March, E and ENE winds prevail. These are the 3 months of heaviest trade in this region and the weather is generally clear and cool with occasional rain.

The Southwest Monsoon begins about the middle of April, somewhat earlier in the W than in the E part of the Arabian Sea. From its inception and through the whole of May, the monsoon is feeble and variable with calm periods, but on the whole SW winds predominate during June; these winds increase progressively and prevail with great regularity through the months of June, July, and August.

During September, the winds remain predominately SW, but with some variable winds and periods of calm interspersed.

In the intervals between monsoons, which are known here as tangambili, the light and variable winds are often interrupted by atmospheric disturbances and squalls.

During the beginnings and ending of the transition periods, there is frequently a brief but violent resumption of the monsoon, often accompanied by rain and lightning.

The Southwest Monsoon is very strong and is accompanied by thick hazy weather over the area between Ras Air and Suqutra, while the Northeast Monsoon brings much lighter winds and fair weather.

Along the N coast of the Gulf of Aden, the winds in summer are often light and variable, and are somewhat fresher by day than by night. On the Arabian coast, to the E of Ras Qusay'ir, the winds of the Southwest Monsoon are much stronger than they are in the Gulf of Aden.

They are strongest between Mirbat and Al Misirah and reach their greatest force in Kuria Muria Bay during the month of July.

The Khamsin of Egypt is a dry wind, although the name is also applied to a dry N wind which occasionally blows in the Gulf of Aden during the Southwest Monsoon.

As the monsoon fails, this wind, without warning, sets in from the N with great violence and usually continues for 3 or 4 hours. It is accompanied by clouds of sand and lightning. The barometer rises quickly about 4 millibars.

Near the end of the Southwest Monsoon, squalls occur near Aden which, though accompanied by thick weather, differ

from the Khamsin in that they carry no sand and the barometer doesn't rise.

The Shamel, which occurs in the Gulf of Aden, is a wind primarily of the Southwest Monsoon period. It is usually N, but may come from the E or W, and prevails periodically during successive days. In the Gulf of Aden, the wind rarely last more than 3 days.

The E coast of Arabia, near the Gulf of Oman, is reached by the Great Shamal of the Persian Gulf. This very hot and dry wind is from the NW and blows almost without cessation during June and the first half of July. Skies are in general cloudless, but the air is hazy and filled with very fine dust which, at times, reaches far out to sea.

A strong land wind, known locally as the Belat, occasionally affects the Arabian coast between Ras Sajir and Al Masirah, usually occurring between the middle of December and the middle of March. This wind is N or NNW. It blows for 1 to 3 days, occasionally longer, and is accompanied at first by the dark red clouds of a heavy sandstorm, and throughout its course by hazy atmosphere.

The Belat nearly always begins between midnight and 0400 with a light breeze, which increases to a moderate gale in about an hour. It blows hardest on succeeding nights between 2100 and 2200, and usually dies out suddenly about the middle of the day.

In some years, this wind is rare, while in other years it occurs frequently. A faint hazy arch over the land in the evening, or the wind shifting toward the land, sometimes in sudden gusts, early in the night, generally indicates the Belat's approach.

Thunderstorms are infrequent in these waters. Vessels observe them occasionally in all months during infrequent rains.

Over the Gulf of Aden and the S part of the Red Sea occur the highest air temperatures known on any water surface, except the Persian Gulf. On the open water of the two S areas, air temperatures rarely exceed 38°C.

There is little fog observed within the area described in this sector. what little fog that does occur is rarely dense and usually disappears rapidly during the morning.

In the Gulf of Aden, haze is infrequent, except in the summer, when it occurs in 12 to 15 percent of the observations.

Exceptional visibility is recorded in 1 out of 4 to 6 of the observations except in July, when it occurs in 1 out of 10 observations.

Dust storms may reduce the visibility to 1 mile. Refraction phenomena in all forms are comparatively common in the Gulf of Aden.

The mirage may be of a simple type or may be any of the complicated types of looming, sinking, distortions, and multiple images common to hot coasts and their adjacent waters.

Tides—Currents.—Surface current speeds and directions throughout the area of this sector are mainly influenced by the Northeast Monsoon and the Southwest Monsoon.

In the Gulf of Aden, during October through April, the currents set SW at speeds ranging from 0.2 to 1 knot, depending on the strength of the wind.

During June, July, and August, the currents set ENE at speeds of about 1 knot near the middle of the Gulf, and up to 2 knots close to the Arabian coasts. Maximum speeds of about 3 knots have been observed along the coast in July and August.

Depths—Limitations.—The depths in the approach to this part of the coast are deep and clear. The 200m curve lies between 1.5 miles and 10 miles offshore, except in the vicinity of Aden, where it extends up to 17 miles seaward, and S and SW of Ras Fartak, where it extends about 23 miles seaward.

Aspect.—Jabal Maufaja (13°40'N., 45°18'E.), 2,240m high, rises about 36 miles N of **Ras Saylan** (13°03'N., 45°24'E.) and is the W extremity of a range that extends about 60 miles E. This range then continues with an irregular outline for 80 miles to the NE.

Jabal al Fadhlī, a lofty range broken into peaks and bluff points, stands 5 miles inland and extends 35 miles E from a location about 30 miles ESE of Jabal Maufaja. Jabal al Urus, 1,730m high, is the highest part of this range. From the S, this peak is easily identified as a fairly sharp top, but from the E it appears as a concave summit standing well to the left of the apparent highest part of the range.

Knob (13°36'N., 46°07'E.), a conspicuous peak, rises about 14 miles W of the E end of Jabal al Urus to a height of 1,219m. It has steep sides and is separated from the main range by a deep cleft. A barn-shaped peak, 1,204m high, stands 6 miles E of Knob and is more conspicuous from the E.

The valleys in this vicinity are thickly covered with vegetation.

Black Hill (13°46'N., 46°59'E.) has two well-marked peaks, with the E peak being the highest. Jabal Humairi, rising about 24 miles ENE of Black Hill, is a rugged range extending about 16 miles to the E. Its 1,611m high summit can be easily identified when viewed from the SE or SW.

A peak, 914m high, stands about 58 miles E of Jabal Humairi, near the seaward end of a mountain range, and is a good landmark when seen from the WSW. From the S, this peak appears to be the westernmost summit of the range.

From a position N of **Al Mukalla** (14°13'N., 49°07'E.), a high range of mountains extends to the E, paralleling the coast about 10 to 15 miles inland.

Jabal Dhuba is isolated, oblong, and table-topped. It stands 20 miles ENE of Al Mukalla and 1 mile inland. This mountain is a good mark.

Jabal Yucalif, rising about 13 miles ENE of Jabal Dhuba and 3 miles inland, is a conspicuous isolated hill. The ruins of a wall and terrace stand on this hill.

Jabal al Hamum, a sand hill topped by a few trees, stands 7 miles NNW of Ras Ba Ghashwah, about 60 miles ENE of Al Mukalla.

One of the most noticeable features of the S coast of Arabia is a series of three horizontal outcroppings of black basalt on the plains between **Raydat Ibn Abd al Wadud** (15°26'N., 50°26'E.) and Wadi Masila, 36 miles E. Each outcropping has one or more cones about 30m above the level of the ground. Around each cone is a low field of basalt, which contrasts markedly with the light color of the plains. Some of the basalt has made its way to the coast through the watercourses and

appears as black rocks. These show up well against the white limestone on either side.

The second cone stands 9 miles E of the first and 3 miles inland. The easternmost cone stands near Wadi Masila. The discharge from these two connect and the discharge from the latter nearby extends almost to the Wadi Masila. Jabal Asad, 1,219m high, stands about 22 miles NE of Raydat Ibn Abd al Wadud.

There is a remarkable gap in the mountains SW of Jabal Asad and 10 miles inland. Jabal Jaihun, 914m high and detached, stands 50 miles ENE of Jabal Asad. This peak is conspicuous from the E and SE. A conspicuous conical peak, 579m high, stands near the coast about 17 miles SSE of Jabal Jaihun.

The Asses Ears, two conspicuous sugarloaf peaks, 561m high, stand on the W shoulder of this peak. These peaks appear as ears when bearing less than 022° but are obscured when bearing less than 295°. Behind the above peaks, the land rises gradually until it reaches the coastal range.

Fartak Range, 609 to 914m high, extends W from **Ras Fartak** (15°38'N., 52°16'E.). Vertical cliffs rising to heights of about 580m extend 8 miles N from Ras Fartak and form the greatest escarpment on the SE coast of Arabia. The cliffs are barren except near the summits, where the vegetation is mainly on the W side. Jabal al Fatk, 609m high, extends W from a position about 55 miles NNE of Ras Fartak and joins the Fartak Range.

To the E of Jabal al Fatk, the Athub Range and Jabal Qamar, 914 to 1,219m high, extend irregularly E and approach the coast. Jabal Qamar, although apparently seen to be barren from a distance, is tree-covered.

Caution.—For details of Firing Practice Areas lying off the coast of Oman, see Pub. 160, Sailing Directions (Planning Guide) South Atlantic Ocean and Indian Ocean.

Numerous oil and gas exploration rigs, with associated pipelines and structures, may be encountered in the waters described in this sector.

Incidents of armed robbery have been reported against ships proceeding in the W and SE parts of the Gulf of Aden. Vessels of any size should be aware of the risks involved when navigating in these waters at speeds of less than 12 knots.

Ghubbat Saylan to Ras Sajir

9.2 Ghubbat Saylan (Ghubbat Sailan) (12°55'N., 45°13'E.), entered between Aden Peninsula and Ras Saylan about 26 miles NE, is bordered by a flat, sandy coast which gradually rises toward the latter point.

A low plain, with numerous hummocks, backs this section of coast for some distance inland. This plain is partially covered by stunted bushes with a few low trees in places but has no prominent features.

Ras Saylan (13°03'N., 45°24'E.), low, round, and sandy, is marked by some palm trees. Several villages stand in the vicinity. Wadi Bana, dry during most of the year, flows into the sea at this point. A detached patch, with a depth of 6.5m, lies about 12 miles WSW of Ras Saylan and 2 miles offshore.

During both monsoons, a current sometimes rounds Ras Marshaq and sets N into Ghubbat Saylan at a rate of 2 to 4 knots. Care should be observed by vessels, especially those

bound W, because in the past several vessels have been wrecked because of this set.

Between Ras Saylan and Shuqra, 25 miles NE, the coast is sandy. Saddle Hill, rising 5 miles W of Shuqra and 0.5 mile inland, is a good landmark.

Barrow Rocks (13°17'N., 45°38'E.), two rocky patches located about 5 miles apart and with depths of less than 2m, lie 4.5 to 7 miles SW of Shuqra and 1.5 miles offshore.

Shuqrah (13°21'N., 45°42'E.), a district capital and port for the area, is divided into three sections by a strip of sand and scrub. The principal buildings stand in the middle part. These include the Shaikh's house and the largest mosque. A white mosque with a conspicuous minaret, 20m high, stands close W of the Shaikh's house. A small minaret stands at the E end of the town, near the foreshore. A large brown building, known as the Sultan's House, is situated midway between the easternmost minaret and the Shaikh's house. A saltworks, well lighted at night, stands about 1 mile E of the town.

Good anchorage can be taken, in depths of 12 to 16m, about 1 mile offshore, with the Sheikh's house bearing about 010°. The current off the anchorage sets W on a rising tide. A break in the coastal reef, which is clearly visible from seaward, forms a boat harbor at Shuqrah and has depths of 1.8 to 4.6m. The current off Shuqrah sets to the W on a rising tide.

The coast between Shuqrah and **Maqatin al Kabir** (13°25'N., 46°26'E.), 43 miles E, is backed by a plain extending inland to the mountain ranges.

Maqatin Saghira, a small boat anchorage, lies about 6 miles W of Maqatin al Kabiris and is formed by a projecting point. A spit, with a sunken rock, extends about 0.5 mile SSW from the point.

Maqatin al Kabir provides anchorage for small vessels with local knowledge on the W side of a rocky spit extending 0.4 mile S from the coast. This anchorage is sheltered from NE winds. Four above-water rocks stand on this spit and appear white from bird droppings. A black ruin, which appears as stones, lies about 0.2 mile N of the inner end of this rocky spit. The ruin is all that remains of the former settlement.

Maqatin al Kabir can be easily identified by two black hills standing close E and near the coast. A group of hills stands about 5 miles ENE of Maqatin al Kabir and forms a good mark, especially in hazy weather. The group appears as one hill when viewed from the E.

A vessel of 1,300 tons approached the anchorage by steering for the S extremity of the innermost above-water rock on a course of 045°. This vessel then anchored on this bearing, in a depth of 11m, at a distance of about 0.4 mile from the rock. The current off the anchorage sets W on a rising tide.

An obstruction was reported (1991) to lie about 23 miles SSW of Maqatin al Kabir.

Between Maqatin al Kabir and Ras al Qusaym, 84 miles ENE, the coastal plain is low and sandy and extends about 35 miles inland to the mountains, which are very irregular in outline.

9.3 Sambahiyah (13°23'N., 46°32'E.), located 6 miles E of Maqatin al Kabir, is a rocky point.

Ahwar, a town standing 10 miles NE of Sambahiyah, consists of a series of villages situated on a broad plain with

high mountains rising to the N. Only the tops of the houses are visible from seaward.

Ras Aulaqi (13°24'N., 46°44'E.), located 13 miles E of Sambahiyah, is low and sandy. A conspicuous white rectangular guard house was reported (1964) to stand near the shore, about 4 miles W of Ras Aulaqi.

Al Hauta is situated on the coast close E of Ras Aulaqi; about 3 miles farther E is a large square tower, with a few houses near it.

Dives Shoal (13°26'N., 47°04'E.), lying about 19 mile E of Ras Aulaqi and about 3 miles offshore, has a least depth of 4.6m, sand. A shoal depth of 33m was reported to lie about 4.5 miles ESE of Dives Shoal.

Sheikh Hurba Tomb (13°36'N., 47°06'E.) stands on the bare shore about 23 miles ENE of Ras Aulaqi. It appears dark brown and is conspicuous from up to 12 miles offshore. Wadi Sanam, 12 miles E of the above tomb, cannot be seen beyond a distance of 3 to 4 miles.

9.4 Al Irqah (13°39'N., 47°21'E.), which consists of a village and a small mosque, stands 15 miles E of Sheikh Hurba Tomb. A fairly small square tower, situated about 2 miles E of the village, is conspicuous. The village, the mosque, and the tower all stand on a low, round projection.

Ras Safwan (13°49'N., 47°36'E.), a slightly projecting point, is located about 15 miles NE of the tower at Al Irqah. It is thinly covered with bushes at the outer edge.

Al Hawrah, a small village situated about 2 miles NE of the point, has two square towers standing on a mound, each about 15m high. Small vessels with local knowledge can anchor in the slight coastal indentations between Ras Safwan and Jabal Makanati, about 6 miles NE.

Jabal Makanati (13°53'N., 47°40'E.), 61m high, is a projecting, whitish-colored bluff, veined by dark strata and terminating in sand hills. A sunken rock lies close SW.

Ras Safwan, Al Hawrah, and Jabal Makanati are all reported to be good landmarks, especially in hazy weather. However, they are somewhat difficult to identify, particularly if the sun is shining from their direction.

9.5 Ghubbat al Ayn (13°59'N., 48°00'E.) is entered between Ras al Qusaym, located about 8 miles ENE of Jabal Makanati, and Ras al Usaydah, 22 miles E. Ras al Qusaym is a low, round, and sandy point.

Ayn Ba Mabad, with a mosque, and Ayn al Juwayri are two villages standing close inland on the N side of the bight. These villages are difficult to identify from a distance because other villages are located in the vicinity. Jilah is a village standing on the NE side of the bight.

The bight is clear, except for some rocky patches, which extend up to 0.6 mile offshore near Jilah, and a shoal bank, which extends up to 0.5 mile offshore in the NE side. In places within the bight, depths of less than 20m extend up to 3 miles seaward. Ras al Usaydah, the E entrance point, rises 0.3 mile inland to a conspicuous dark, conical hill, 50m high. Three small rocky points project from this headland.

Black Barn, a prominent hill, stands 2 miles N of Ras al Usaydah. It has been reported that a conspicuous radio mast stands about 5 miles NE of the headland.

Balhaf, a small town, stands at the head of a small bay on the W side of Ras al Usaydah. It is conspicuous from the W, but not visible when bearing less than 040°. A prominent tower stands in the town, with a smaller one situated close S of it. Another tower stands near the coast, about 0.4 mile N of the town. Good anchorage can be taken W of the town, in a depth of 16.5m, with the northernmost tower in the town bearing 077°, distant about 0.2 mile.

Rudum Terminal (13°58.7'N., 47°54.6'E.), located at the W side of Ghubbat al Ayn, consists of an SPM buoy, which can handle tankers up to 20,000 dwt. A submarine pipeline extends N from the berth to the mainland.

9.6 The coast extending E of Ras al Usaydah is very irregular, with many small projecting points.

Ras ar Ratl, located about 3 miles E of Ras al Usaydah, is a conspicuous, round volcanic promontory of considerable height with an apparently extinct crater in the middle. Small boats with local knowledge can anchor in the bays lying on either side of the point.

Bandar Husn al Ghurab (14°01'N., 48°21'E.) is entered E of Jabal Husn al Ghurab, a 139m high steep-sided, square, and black hill standing about 6 miles ENE of Ras ar Ratl. Some ruins stand on the summit of this hill. The W side of the bay is clear of dangers but the E side is fouled by a shallow shoals. Bir Ali, a village with a square tower, is situated at the head of the bay.

Hillaniyah (13°59'N., 48°19'E.), an islet with several rocky points, lies about 1 mile S of Jabal Husn al Ghurab. A shoal bank, with a least depth of 3.7m, extends about 0.4 mile E from the E side of the islet. Small vessels with local knowledge can find moderate shelter from E winds off the W side of the islet.

Small vessels with local knowledge can also anchor, in a depth of 7m, about 0.5 mile off the W side of Bandar Husn al Ghurab. During the Southwest Monsoon, anchorage should be taken farther W with Jabal Husn al Ghurab, 139m high, bearing 180°.

Directions.—Vessels from the W should pass S of Hillaniyah in depths of not less 37m. They should then pass about 1 mile E of the islet in order to avoid the shallow water in the E part of the bay. Vessels from the E should not approach the E entrance point of the inlet in depths of less than 31m. They should also avoid the shoal water in the E part of the inlet prior to changing course for the anchorage.

9.7 Ghadarayn (14°00'N., 48°23'E.), consisting of two small islets lying about 0.5 mile apart, is situated 3.5 miles ENE of Hillaniyah. The passage leading between these islets and the coast is clear but the channel lying between the islets almost dries.

Sharan is a circular, table-topped hill standing close NW of Ghadarayn. This hill has a crater full of salt water, which is fringed by prominent overhanging mangroves.

Sikha (13°55'N., 48°23'E.), lying 4 miles S of Ghadarayn, is 111m high, hump-backed, and covered with white guano on its summit. This island has been reported to be radar prominent.

A detached bank, with a depth of 26m, was reported (1964) to lie about 7 miles SE of Sikha.

A detached bank, with a depth of 14.5m, was reported (1979) to lie about 7.5 miles SE of Sikha.

Maqdaha Bay is entered between Ghadarayn and Ras Mijdahah, 3 miles E, and provides good anchorage to small vessels with local knowledge. Except for a shallow rock lying in the middle of the head, about 0.5 mile offshore, the bay is free from dangers.

The horns of a crescent-shaped half crater extend 0.3 mile from the head of the bay. Ras Mijdahah, dark and fairly high, is the extremity of a broken range, which extends about 10 miles inland.

A square white tower, conspicuous from NW, stands on the W side of Ras Mijdahah. Good anchorage can be taken by small vessels with local knowledge, in a depth of 14.7m, sand, with the tower bearing 055°, distant 0.3 mile.

Barraqah (13°59'N., 48°28'E.), a small islet, lies 0.4 mile S of Ras Mijdahah and is reported to be radar prominent. It is 180m high and steep. The summit, a crater, is covered by white guano. From the S, this islet appears square, with a flat top, and steep. From E or W, it appears to slope from the S cliff to the summit at the N end.

The coast between Ras Mijdahah and Ras al Kalb, 13 miles ENE, is low and sandy. Ras al Kalb is low, round, and sandy. This point is not easily identified, but a radar conspicuous stranded wreck, position approximate, was reported (1985) to lie close off it. The superstructure and one mast were visible.

The first part of the coast lying between Ras al Kalb and Al Mukalla, 38 miles NE, is barren, with sandhills extending some distance inland. The irregular peaks and bluffs of the interior mountains are sometimes covered with snow during the winter. The heights of these peaks range from 609 to 1,219m.

The current off this part of the coast sets to some extent toward the shore.

Kalb, a village, stands 3 miles NE of Ras al Kalb and behind some sandhills in a large break in the coastal range. A large fort is situated at its W end and four conspicuous white two-story buildings stand near the coast at its E end. A gray stone tomb stands on a small hill ENE of village. Although inconspicuous, the tomb is useful in identifying Ras ar Rujaymah, close E of it.

9.8 Ras ar Rujaymah (14°08'N., 48°48'E.), located 8 miles NE of Ras al Kalb, is 91m high and has a dark-peaked outline. Conspicuous from seaward, this point is the W end of the bold, dark, precipitous land extending to within 15 miles of Al Mukalla.

Al Ghaidha, a town, stands 2 miles inland among luxuriant date groves in a valley between Ras ar Rujaymah and Ras al Hasah al Hamra.

Ras al Hasah al Hamra (14°12'N., 48°52'E.), located 16 miles NE of Ras ar Rujaymah, is the outer end of a rugged range of hills extending some distance inland. A village stands in a grove of trees midway between these two points.

Ras al Himar, a low bluff, is located 4 miles NE of Ras al Hasah al Hamra. A village stands on the shore of the small bay formed between these two points.

Ras Barum (Ras Burum) (14°19'N., 49°00'E.), located 5 miles NE of Ras al Himar, is the E end of a bold, dark, craggy promontory, which rises to a height of 335m. A rocky, steep-to spit, with an above-water rock at its inner end, extends about 0.3 mile E from this point.

Small vessels with local knowledge can anchor, in depths of 5.5 to 12m, within a small bay on the SW side of Ras Barum.

9.9 Bandar Barum (Bandar Burum) (14°20'N., 48°57'E.) lies between the NE side of Ras Barum and Radham Bluff, about 2 miles NNW. This bay provides safe anchorage during the Southwest Monsoon, but it is exposed to E and NE winds.

The small town of Barum (Borum) stands in a grove of trees on the NW side of the bay. A tomb stands about 1 mile W of the S end of the town, but is obscured by hills when near the anchorage.

During the Southwest Monsoon, vessels can anchor, in depths of 9 to 12.8m, good holding ground, SE of the town. However, a ground swell sometimes rolls into this anchorage.

During the Northeast Monsoon, a vessel anchored close inshore, in a depth of 12.8m, with the S side of the town bearing 280° and the E end of Radham Bluff bearing 008°. Vessels roll heavily at times in this anchorage but strong dangerous winds are rare.

A vessel also anchored, in a depth of 20m, with the SE extremity of Radham Bluff bearing 329° at a distance of about 0.5 mile.

The coast between Radham Bluff and Al Mukalla, 14 miles NE, continues low and sandy, with high mountains rising in the interior. The shore is fringed by a shallow bank which extends up to 1 mile seaward.

Ras Marbat (14°30.5'N., 49°09.6'E.) is the SW extremity of Mukalla Promontory. A conspicuous white house, in ruins, stands on this point. The sea in the vicinity of this point is very clear, when smooth and calm, and the bottom is plainly visible in depths of 22 to 27m.

Mukalla Promontory, which forms the E side of the bay, is hilly. The hills extend inland, attain heights of over 1,000m, and slope to within 0.2 mile of the coast, which is low.

Rocky Bank, a shoal area with a least depth of 4.5m, lies about 0.6 mile S of the S end of Mukalla Promontory and may best be seen on the chart.

Jabal al Qara (14°32'N., 49°08'E.), a conspicuous hill, rises 2 miles NW of Ras Marbat. It is 390m high and has a radio mast situated near the summit.

A conspicuous minaret stands about 0.7 mile WSW of Jabal al Qara, near the foreshore.

Al Mukalla (14°30'N., 49°09'E.)

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9.10 Al Mukalla (Khalf Harbor) is second only to Aden as the principal port on the S coast of Yemen. A considerable amount of cargo is lightered to and from the anchorage. During the Southwest Monsoon, a considerable part of this cargo is diverted to the secure anchorage off Bandar Barum.

Winds—Weather.—The Southwest Monsoon blows fresh, but when the sun declines, the wind and sea abate; in the morning at this season strong NW winds often blow. It is exceedingly hot in the middle of the day, but from October to April, and often in June and July, the land and sea breezes, accompanied by occasional showers, bring relief.

Tides—Currents.—The diurnal rise of tide is 0.7m, while the spring rise is 1.2m. Currents in Mukalla Bay usually set

SW on rising tide, but caution should be exercised when lying at the anchorage. A vessel reported that after experiencing a weak W current, an E current set in suddenly, with considerable strength, causing it to drag and ground.

Depths—Limitations.—Khalf Harbor, entered 0.9 mile NW of Ras Marbat, is protected by breakwaters. It has a depth of 11m in the entrance.

There are two main commercial berths. Berth No. 1, on the NE side of the S breakwater, is 177m long and has a depth of 9.1m alongside. Berth No. 2, on the SE side of the harbor, is 184m long and has a depth of 9.1m alongside. Vessels up to 17,000 dwt, with a maximum length of 145m and a maximum draft of 8.5m, can be accommodated. It is reported that vessels are limited to a length of 75m during the Southwest Monsoon.

There is also a fishing quay, 160m long, with a depth of 4.5m alongside.

An oil terminal lies SE of the harbor. It consists of a submarine pipeline extending about 0.2 mile SW from a point on the shore 0.5 mile NNW of Ras Marbat. Tankers moor heading SW, with two anchors down and their stern secured to two mooring buoys situated near the seaward end of the pipeline. The depth in the anchorage position is about 37m.

The berth should be approached on a course of 117°, with Ras Marbat just open on the port bow. The anchors are dropped on the alignment of two sets of beacons. The starboard anchor is dropped when a rear beacon, situated near the shore about 0.5 mile NNW of Ras Marbat, is in line with the northwesternmost of two front beacons, bearing 042°. The port anchor is dropped with the same rear beacon in line with the southeasternmost front beacon bearing 025° and with two beacons, situated near the shore about 0.2 mile NNW of Ras Marbat, in line, bearing 085°. Better positioning in the berth may be achieved by overrunning slightly the transit as seen from the forecabin before letting go the anchors.

Wind and current conditions are most favorable for berthing early in the morning. The terminal is used only from the beginning of October to the middle of May.

Aspect.—The town is situated at the head of the bay, partly on a rocky projection and partly on the mainland close N of it. The part on the mainland stands on a series of terraces on a slope, at the base of a range of reddish limestone cliffs. These cliffs are about 90m high and rise immediately at the back of the town.

Several high towers of ruined forts stand NE and NW of the town. The N part of the town is enclosed on the W side by a wall, which extends from the cliffs to the coast. The houses in the town are mostly built of stone and are four or five stories high. The land close to the town is barren but, 1 mile inland and W of it, there are large date groves and gardens.

Several prominent structures stand in the vicinity of the harbor, including a small village, a minaret, a mosque, a small fish cannery, and some oil tanks.

Two conspicuous stranded wrecks lie close apart, about 0.3 mile W of the rocky projection on which the town stands. The southernmost wreck was reported to resemble a vessel at anchor working cargo.

Pilotage.—Pilotage is compulsory. The harbor pilot may be contacted by VHF and boards off the breakwater. Vessels enter and depart during daylight hours only. Vessels should send an

ETA 96 hours in advance, through Aden (70A), and contact the Harbor Control as soon as within VHF range.

Anchorage.—The best anchorage is in a depth of 31m, about 0.8 miles WSW of the head of the S breakwater and 0.4 mile S of the rocky projection on which the town stands. This anchorage is used by vessels up to 10,000 dwt to discharge cargo into lighters.

The anchorage is exposed to the Southwest Monsoon and may be closed from May to October.

Caution.—Anchorage is prohibited within 350m of a submarine pipeline, which extends 0.4 mile SSW from a point on the shore at the W side of the town. Diffusers, which protrude above the seabed, are located at the extremity of this pipeline.

In the vicinity of the oil terminal berth, vessels have experienced difficulty with jellyfish choking the main engine intakes, though this normally only occurs at the beginning of the Northeast Monsoon.

A dangerous wreck is reported (1998) to lie, position approximate, about 0.6 mile SW of the S breakwater head.

9.11 Between Mukalla Promontory and Sharma Bay, 49 miles ENE, the coast is mainly formed by an almost unbroken line of low sand.

Bandar Ruwayni (14°32'N., 49°10'E.), extending NE of Mukalla Promontory, provides anchorage, sheltered from the Southwest Monsoon, to vessels with local knowledge, in depths of 7 to 11m. The depths increase rapidly to seaward of this bay.

A large mosque stands in the village of Ar Rukaib, about 3.5 miles NE of the E side of Mukalla Promontory. Buwaysh, another village, stands in a valley surrounded by date groves, about 3 miles farther NE.

Ash Shuhair (Shuhayr) (14°39'N., 49°22'E.), standing near the coast 12 miles NE of Ar Rukaib, is in ruins but a conspicuous fort is situated in this vicinity.

Suq al Basir, a town standing 4 miles N of Ash Shuhair, has some mosques, which are visible from seaward.

Ash Shihr (14°45'N., 49°34'E.), a small town, is situated 13 miles ENE of Ash Shuhair and has a conspicuous castle standing in it. Two custom houses and a mosque, with white domes, are also prominent from seaward.

A shoal patch, with a depth of 10m, was reported to lie (position approximate) about 1.5 miles S of the town.

Anchorage can be taken, in depths of 12 to 21m, sand and shells, between 0.7 mile and 1 mile off the town.

9.12 Ash Shihr Oil Terminal (14°42'N., 49°29'E.) is located about 5 miles SW of the town. It consists of an SPM, moored 2 miles offshore, which is connected to the coast by a submarine pipeline. The facilities on the shore are fronted by a boat harbor, which is protected by an L-shaped breakwater.

The SPM is moored in a depth of about 45m. Buoys are moored between the SPM and the shore in order to mark the 27.4m depth contour. The terminal can handle tankers in the 80,000 to 350,000 dwt range.

Pilotage is compulsory. Vessels must send an ETA 10 days, 72 hours, 48 hours, 24 hours, and 12 hours in advance. The terminal can be contacted by VHF and a mooring master with an assistant board about 2 miles seaward of the SPM.

The terminal area is delineated by a circle, with a radius of 3 miles, centered on the SPM. Anchorage is prohibited within this area. Anchorage is not recommended anywhere in the vicinity of the terminal because the bottom consists of dolomite limestone with bad holding ground. Any attempts to anchor while waiting should be carried out well clear and to leeward of the terminal and its facilities.

9.13 Hami (14°47'N., 49°49'E.), a village with a date grove and cultivated ground in the vicinity, stands at the base of a dark double hill about 14 miles ENE of Ash Shihr.

Anchorage can be taken by small vessels with local knowledge, in depths of 12 to 14m, about 1 mile off this village.

Sharmah Bay (14°48'N., 49°56'E.) is entered between a point near the E end of the cliffs, about 2 miles ENE of Hami, and Ras Sharmah, 7 miles E. Husn al Musaina'a, an old fort in ruins, stands on a rocky hill on the N shore of the bay, about 5 miles WNW of Ras Sharmah.

Dis, a walled town, stands 2 miles NNE of the fort. Al Qarn is a small village situated on the NE side of the bay, about 2 miles NNW of Ras Sharmah.

Northwest Bluff, 52m high, stands 1.5 miles N of Ras Sharmah. It is the NW extremity of Moshar Sabir Hills, which extend from a position about 0.5 mile NE of Ras Sharmah.

Jazirat Sharmah, a 21m high islet, lies about 0.3 mile W of Ras Sharmah.

Good anchorage can be taken, in depths of 7 to 9m, with Ras Sharmah bearing 157°, distant 0.5 mile. Small vessels can anchor off the village of Al Qarn, in depths of 3 to 7m. The current in the bay sets W with a rising tide.

The coast between Ras Sharmah and Ras Ba Ghaswah, 9 miles E, is formed by a succession of limestone and chalk cliffs, which rise almost vertically to heights of 90 to 120m. From there to Ras Qusayir, 13 miles ENE, the coast is low and sandy.

Ras Ba Ghaswah (14°50'N., 50°05'E.), with a village standing close E of it, is reported to be a radar-prominent point. It is surmounted by some conspicuous ruins. Another village, situated 4 miles W of the point, stands in a gap in the cliffs and is fronted by a sandy beach.

Ras Qusayir (14°54'N., 50°17'E.) is low and rocky. A rocky shoal, which partly dries, extends about 0.4 mile S from this point. Two rocky islets lie on this shoal about 0.2 mile WNW of the point.

9.14 Qusayir (14°56'N., 50°17'E.), a town walled on all except its seaward side, stands 1 mile NNE of Ras Qusayir. A square fort in ruins and a grove of trees stand close NNW of the town. A scattered village is situated 1.5 miles W of the fort.

Anchorage can be taken, in a depth of 12m, W of Ras Qusayir and the rocky shoal, but the depths rapidly decrease toward the coast. Unsheltered anchorage can be taken, in depths of 22 to 26m, S of the rocky shoal. Small craft with local knowledge can obtain shelter E of the two rocky islets lying on the shoal and in the lee of a reef, 0.7 mile NE of the point. A heavy surf rolls in even in fine weather, and landing is difficult.

The coast extending ENE of Ras Qusayir is low and sandy for a distance of 35 miles to Thamun (Tanum). From there to

Ras Aqaba (Ras Akyab), about 30 miles farther ENE, the coast is straight, with a low coastal ridge, which appears black against the sandy mountains inland. Black Peak, 76m high, and Cone, 152m high, are the tallest points on this ridge and stand 5 miles W and 6 miles NE, respectively, of Thiamine.

The depths off this stretch of coast, between Ras Quasar and a point 23 miles ENE, are irregular and the bottom is rocky with overfills. Harry and Soarer are two small villages standing about 5 miles and 7 miles NE, respectively, of Ras Quasar. A prominent round tower stands at Harry and numerous trees are located in the vicinity of Soarer.

Radiate al Bad al Waded (Raid) (15°01'N., 50°26'E.), located about 12 miles NE of Ras Quasar and about 1 mile inland, has a large white watch tower, marking the landing place, close W of it. Husn al Kithira, a ruined fort, stands 2 miles NW of the town. There is no safe anchorage in this vicinity.

Musayniah (15°03'N., 50°39'E.), the site of a town in ruins, is situated 12 miles E of Raydat al Abd al Wadud. The swampy land in the vicinity is marked by numerous mangrove trees. A conspicuous white fort stands in the village close inland.

Temporary anchorage can be taken, in a depth of 11m, mud and sand, about 2 miles offshore.

Palinurus Shoal (14°55'N., 50°41'E.), lying about 8 miles offshore, has a least depth of 4.5m, rock and coral. Depths in the vicinity of this shoal are irregular.

Vessels are advised to keep clear of this danger by staying well inshore or at a distance of at least 12 miles from the coast.

Wadi Masila, a large well-watered valley with numerous villages and palm trees, is located E of the Jabal Asad mountain range and is the continuation to the sea of another wadi. Wadi Masila appears to divide the mountains into distinctly separate tracts; their sides are high and the summits are usually obscured by clouds. A ruined fort stands on each side of the entrance.

9.15 Sayhut (15°13'N., 51°14'E.), located about 35 miles ENE of Musayniah, consists of some stone houses and mosques. Good anchorage can be taken off the village, in a depth of 10m, mud, with a large white house in the village bearing 315° and the S end of the promontory, of which Ras Sharwayn is the E extremity, bearing 070°, and a little open of Ras Uqab.

Ras Uqab (Ras Akab) (15°14'N., 51°19'E.), located about 7 miles ENE of Sayhut, is high, red, sloping, and rocky. Ras Rakhwayt and Ras al Kafir, two bluffs, stand between Ras Uqab and Ras Itab, about 7 miles ENE. During the Northeast Monsoon, small craft can shelter in the bays which indent this coast.

Ras Itab (15°17'N., 51°26'E.) is fairly high and terminates in a low point which forms the W entrance of Bandar Itab.

Bandar Itab (15°18'N., 51°33'E.), a slight indentation between Ras Itab and Ras Sharwayn, 14 miles ENE, provides some shelter from NE winds. With a fresh sea breeze, a considerable surf breaks on the beach along the shore.

Itab (15°20'N., 51°28'E.), standing about 3 miles NNE of Ras Itab, has three mosques, with a minaret on the westernmost. A grove of trees stands W of this village.

Qishn Bay (15°25'N., 51°47'E.) is entered between Ras Sharwayn, the E end of a steep-to promontory, and Ras Darjah,

14 miles ENE. These two similar points have a quantity of sand blown up on their W sides. Ras Darjah consists of steep cliffs, 60 to 120m high.

During the Southwest Monsoon, the breaking seas have formed coves at the bases of these cliffs. It has been reported that Ras Sharwayn and Ras Darjah are radar conspicuous.

The low, sandy shore of the bay is backed by barren sandhills and a high range of hills a few miles inland. A heavy ground swell and a high surf break on the shores of the bay, except in a small cove close W of Ras Darjah.

9.16 Qishn (15°26'N., 51°41'E.), a small village, stands on the bay shore about 5 miles N of Ras Sharwayn. A salt water lagoon and a few trees stand at Suq, about 2 miles NE of Qishn.

The best anchorage is located in Bandar Lask, in the SW part of Qishn Bay. A good berth is in depths of 7.3 to 9.1m, about 0.5 mile offshore, with Ras Sharwayn bearing 158°, and a tomb about 2 miles NW of Ras Sharwayn bearing 270°. During the Southwest Monsoon, vessels are sheltered here in comparatively smooth water, while in other parts of the bay a heavy swell sets in.

Between Ras Darjah and Ras Fartak, about 25 miles ENE, the low sandy coast is barren except for some small bushes and cultivated areas near the villages. Some sandhills rise to the high range of hills inland.

Khar Maghshi, a small salt water lagoon, lies about 5 miles NE of Ras Darjah and close to the coast. A rock, with a depth of less than 1.8m, lies about 4 miles NNE of Ras Darjah.

During the Southwest Monsoon, small craft can anchor between Ras Darjah and this rock, completely sheltered.

Saqr (15°33'N., 51°58'E.), located about 8 miles NE of Ras Darjah, stands in a grove of trees close to the coast. A large white mosque stands on a low cliff SSW of this village.

A fortified house stands at the W end of a village, about 3 miles ENE of Saqr; about 7 miles farther ENE is the village of Haswayn, near some palm trees.

Khaysayh (15°37'N., 52°15'E.) stands at the mouth of the valley at the base of the high land on the W side of Ras Fartak.

Coastal vessels can anchor off this village. A grove of trees stand about 2 miles inland and is flanked on both sides by villages.

Caution.—Because of the variable currents in the vicinity, care must be taken in thick weather not to mistaken Ras Sharwayn for Ras Darjah.

9.17 Ghubbat al Qamar (16°20'N., 53°00'E.) lies between Ras Fartak and Ras Sajir, about 100 miles NE, and provides anchorage during offshore winds in convenient depths. No shelter is provided with onshore winds.

Tides—Currents.—The current beginning to set ENE along the SE coast of Yemen early in April is apparently deflected NNE near Ras Fartak toward the coast around Damgaut; its average velocity is 2 knots.

During the Northeast Monsoon, it sets in the opposite direction at 0.5 to 2.5 knots, but during this season, it often sets against the wind between Ras Fartak and Ras Naws, about 200 miles E.

In Ghubbat al Qamar, there are very weak tidal currents between Khawr Khalfut and Airub, which are accompanied by strong rips in places.

Ras Fartak (15°39'N., 52°16'E.), which is steep-to and rises to Jabal Fartak Range, appears as an island with a gap in the middle from a distance of 30 miles S. It is supposed to be the ancient Syagros because it resembles a boar's head when viewed from the SW or E at a distance of 20 to 30 miles. This promontory is radar conspicuous. It is reported that a radio mast stands near the S end of this promontory.

Ras Fintas (15°48'N., 52°14'E.), located 9 miles N of Ras Fartak, is a bluff cape, 61m high, surmounted by a conical hill. In the vicinity of this cape the high land recedes inland from the coast. A small village stands in a small bight close N of this cape.

Khawr Khalfut, a small bight where coastal craft are hauled up during the Southwest Monsoon, lies about 5 miles NNW of Ras Fintas.

Tabut and Hayrut are small villages standing about 5 miles and 7 miles N, respectively, of this bight and about 1 mile inland. A small saddle hill rises behind and between these villages.

Nishtun (15°49'N., 52°12'E.) is a small commercial and fishing port lying on the NE side of a bight, about 3 miles N of Ras Fintas. The harbor is protected by two breakwaters and has a pier, 220m long, which can accommodate vessels up to 3,000 dwt, with a maximum length of 90m and maximum draft of 5.5m, along its NW face.

A light is shown from the head of the SE breakwater; another light is shown from a structure standing close E of the breakwater root.

Pilotage is compulsory for vessels over 200 grt. Pilots can be contacted by VHF and are available for berthing only by day. Anchorage is available about 0.4 mile SE of the breakwater light and clear of the harbor entrance.

Caution.—The port is exposed to heavy sandstorms during the monsoon season (July to September).

During the Southwest Monsoon, seas may break over the breakwaters.

9.18 Al Ghaydah (16°12'N., 52°16'E.), the largest town on the shores of Ghubbat al Qamar, stands 14 miles NNE of the village of Hayrut and 2 miles inland.

From February to April, small craft with local knowledge anchor about 1 mile off this town, over a sandy bottom.

Qabr Qaylul (Abd Allah Gharib), a tomb with some date trees in its vicinity, stands close to the coast about 8 miles NNE of Al Ghaydah. The village of Airub (Jarub) stands 3 miles farther NNE.

An isolated shoal patch, with a depth of 32m, was reported (1999) to lie about 9.5 miles ENE of Qabr Qaylul.

Al Jawhari (16°29'N., 52°27'E.), a white tomb with a few huts nearby, stands 9 miles inland. The coast between Al Jawhari and Ras Sajr, 65 miles ENE, is backed by mountains. A wadi separates Jabal al Fatk from the Athub Range, which terminates in a dark bluff point. Overfalls are reported to occur in the vicinity of the 200m curve about 7 miles SE of the wadi's mouth.

Damqawt (Damghut) (16°34'N., 52°50'E.) is a small port lying on the N side of Ghubbat al Qamar. It stands on an

irregular plain in a valley at the W end of Jabal Qamar Range. The town is surrounded by mountains, except on its seaward side. A ruined fort stands on a cliff behind the town and a lagoon, with a few trees around it, lies on the W side of the town. A reef, over which the sea breaks, extends about 0.1 mile from the shore fronting the town. When the SW swell is not heavy, there is good landing on the E side of this reef, but at the same time the W side may be unapproachable.

Jadib (Jadhib) (16°37'N., 52°58'E.), a village built under some projecting rocks, stands about 9 miles ENE of Damqawt. The village of Hawf, with a tower, stands about 2 miles farther ENE.

Ras Darbat Ali (16°38'N., 53°03'E.), a small rocky point, is about 61m high and lies 3.5 miles E of the village of Hawf. A very conspicuous bluff, 1,204m high, stands about 3 miles NNE of this point. The bluff appears most conspicuous when viewed from the SW.

The international boundary between Yemen and Oman lies in the vicinity of Ras Darbat Ali.

Palkut (Dhalqut), a grove of trees, stands about 14 miles ENE of the village of Hawf. Al Kharifut, a fertile valley, lies about 5 miles farther E. Rakhyut and Safqut, two separate villages, stand about 10 and 13 miles ENE, respectively, of Palkut. Ras Sajr is located 6 miles E of the village of Safqut.

Ras Sajr to Ras al Hadd

9.19 Winds—Weather.—Around the middle of June, the strong Southwest Monsoon raises a heavy sea, but early in April, the advance swell of the monsoon begins to roll into Ghubbat al Qamar accompanied by a heavy surf. During this season, most of the inhabitants of the coastal plains retire to the mountains.

In April and May, there are frequent gusts of winds and occasional thunderstorms on Jabal Qamar and Jabal Samhan.

From June to September, it sometimes blows from the N for some days, and in July and August, this wind sometimes brings with it swarms of locusts.

The low-lying coastal plains, the majority of which consists of sandy desert and basaltic formations, are very hot. In the vicinity of the sea, the atmosphere is moist and steamy. In the lower valleys, the oppressive atmosphere is stifling by day and very damp at night.

During the Southwest Monsoon, the atmosphere on Zufar (Dhufar Plain) is oppressive, but the winter months are temperate.

During the Southwest Monsoon, Jabal Qamar and Jabal Samhan are often completely obscured by clouds for weeks, and the local inhabitants report that the sun is often not visible for days; this may account for the extremely fertile nature of these hills.

Depths—Limitations.—The depths in the approach to this part of the Arabian coast are deep and clear of all known dangers. The 200m curve lies at distances ranging from less than 1 mile E of Mirbat to about 48 miles off Khalij al Masirah. There are no known dangers lying outside the 200m curve, but several shoals and banks lie close within this curve. These dangers will be described together with the coastal features which they front.

9.20 Ras Sajr (16°45'N., 53°35'E.), steep and rounded, rises to a height of 844m. The summit of the range in this vicinity is formed a level tableland 1,106m high. The E side of Ras Sajr forms a vertical escarpment but is not as high as the SW side. The latter side descends in three or four large steps, the ledges of which are so narrow that the summit can be seen only when 0.5 mile from the base. The bluff fronting this cape rises vertically from the sea and is steep-to.

A stranded wreck was reported (1997) to lie on the SW side of Ras Sajr.

Jabal Samhan (17°04'N., 54°38'E.), 914 to 1,219m high, extends 73 miles E from a position about 33 miles NE of Ras Sajr to Jabal Naws. This range closely approaches the coast in the vicinity of Mirbat (16°59'N., 54°41'E.) and terminates abruptly in cliffs.

Ghubbat al Fadaiyh (16°49'N., 53°51'E.), entered between Ras Sajr and Ras al Himar, 24 miles ENE, has a rocky, irregular coast. A rocky islet stands close offshore about 9 miles NE of Ras Sajr. A sunken rock lies close off the N and S ends of this islet.

Ras Himar (16°54'N., 53°57'E.) is a rocky bluff of irregular hills projecting from the mountain range within the coast. A conspicuous needle-shaped peak, with a notch between it and a similar peak, stands on the summit of this bluff.

Zufar (Dhufar Plain) (17°02'N., 54°10'E.), the largest of the lowland tracts between the coast and mountains, and one of the most fertile districts on the S coast of Arabia, fronts the curve of the high land between Ras Himar and Khawr Taqah, about 27 miles E.

Ras Raysut (16°55'N., 54°00'E.), located 4.5 miles ENE of Ras Himar, is 30m high, much scarped, and very irregular near its summit. A small tower, in ruins, stands on the summit and an ancient cemetery is situated further inland on the ridge. A small rocky islet fronts the point on the E side.

Caution.—A disused (1996) explosives dumping ground area, the limits of which may be best seen on the chart, lies centered 20 miles SE of Ras Himar.

9.21 Mina Raysut (Port Raysut) (16°56'N., 54°02'E.) ([World Port Index No. 48230](#)), lying N of Ras Raysut, is the port for Salalah and is also known as Port Salalah.

Winds—Weather.—Local authorities have reported that a dense fog prevails in the outer port area during the Southwest Monsoon.

Tides—Currents.—The maximum tidal range here is generally about 2m. However, during the monsoon season (June to August), the range may be as much as 4m. During the onset of the Northeast Monsoon, a vessel experienced a SW set of about 3 knots at a position about 5 miles from the port. Closer to the port, the vessel reported negligible set and drift.

Depths—Limitations.—Deep water is found close inshore to the W of the port, but depths of less than 10m are found up to 1.5 miles off the coast at the E side.

The harbor, situated on the N side of Ras Raysut, is protected by two breakwaters. The entrance channel is dredged to a depth of 16.5m (1998). The N part of the harbor basin is dredged to a depth of 16m (1998).

An oil berth, located on the NW side of the E breakwater, has a least depth of 12m alongside and can handle tankers up to 35,000 dwt.

A spur extends into the harbor from the root of the E breakwater and provides eight main commercial berths. Berth No. 1 through Berth No. 3, on the NE face, have a total length of 519m and a depth of 10m alongside. Berth No. 4, on the NW end of the spur, is 200m long and has a depth of 8m alongside. Berth No. 5, through Berth No. 8, on the SW face, have a total length of 460m and a depth of 4m alongside. There is also a quay, 260m long, with a depth of 3m alongside, which is used by small craft and fishing boats.

The port has facilities for container, reefer, general cargo, tanker, ro-ro, and fishing vessels. Vessels up to 150,000 dwt, with a maximum length of 168m and a maximum draft of 9.8m, can be accommodated.

It is reported (2000) that a new container quay, 1,206m long, is located along the S side of the N breakwater and has a depth of 16m alongside.

Aspect.—Two cement silos and several prominent tanks stand in the vicinity of Ras Raysut.

Two conspicuous radio towers stand 3 miles NNE of the E breakwater head and about 0.4 mile N inland.

It is reported (2000) that the gantry cranes standing on the new container quay, on the S side of the N breakwater, are prominent from seaward.

An outer fairway lighted buoy is moored about 1.8 miles E of the harbor entrance.

A light, equipped with a racon, is shown from a structure standing on the E breakwater head. Two directional sector lights, which indicate the entrance channel, are shown from the head of the N breakwater.

Pilotage.—Pilotage is compulsory for vessels over 150 nrt. Pilots may be contacted by VHF and board about 3 miles E of head of the E breakwater.

Vessels should send an ETA message 96 hours, 48 hours, 36 hours, and 24 hours in advance through the agent or by telex/fax. The first message should include the vessel's length, draft, nrt, grt, cargo distribution details, last port of call, next port of call, and vessel's flag. Pilotage can be provided with 1 hour notice.

All inbound vessels should contact the port when within VHF range. All vessels in the port should maintain a continuous listening watch on VHF channel 12.

Anchorage.—Anchorage is available within a designated area, the limits of which may best be seen on the chart, lying centered about 2 miles E of the E breakwater. The area has depths of 20 to 29m over a bottom reported to be sandy.

Caution.—It is reported (1997) that wave recorder buoys are often moored within 1.5 miles SE of the E breakwater head.

9.22 The coast between Ras Raysut and Dahariz, 10 miles ENE, is marked by green fields, coconut trees, and buildings. From Dahariz to Khawr Taqah, 14 miles E, the land is swampy and covered with mangroves, but from there to Mirbat, about 18 miles farther E, the coast is fronted by a series of limestone cliffs, 30m high. The surf generally breaks along this coast even in calm weather.

Good anchorage can generally be taken off this section of coast, in depths of 9 to 13m, and about 0.5 mile offshore.

Awqad (17°00'N., 54°03'E.), a village with a lagoon in its vicinity, stands 4.5 miles NNE of Ras Raysut. A similar village stands about 1 mile farther NE.

Salalah (17°01'N., 54°06'E.), the principal trading center of this area, stands 3 miles E of Awqad. The town consists of stone houses surrounded by a grove of palm trees. The Governor's Palace and a white fort front the town.

Three radio masts stand, at an elevation of 25m, about 1 mile W of the palace. A stone tower, standing 0.9 mile W of the radio masts, is small but prominent. It is reported (1998) that a conspicuous mosque is situated 0.6 mile WNW of this tower.

An aeronautical radio beacon is situated in the vicinity of an airfield, about 2 miles N of the palace.

Dahariz (17°01'N., 54°11'E.) fronts the coast and is surrounded by watch towers. A grove of coconut trees and some cotton fields are located on the W side of the village and a lagoon lies on the E side. A fort in ruins stands about 2 miles E of the village.

9.23 Ras Mirbat (16°59'N., 54°41'E.), fronted by foul ground, is a low, rocky point, which is reported to be radar conspicuous. The ruins of a tomb stand close ESE of the point, but are only visible from W.

A stranded wreck fronts the coast about 3.5 miles SE of Ras Mirbat.

Some inhabitants of the area dwell in large caves, which are situated on the precipices of the cliffs extending along parts of the coast to the W of the point. Lights from these caves may sometimes be distinguished along the coast at night.

Mirbat (16°59'N., 54°41'E.), a town composed of stone houses and huts, stands on the E side of a bay lying N of Ras Mirbat. A conspicuous fort, with a flagstaff, stands near the shore at the N end of the town. A white mosque, with a dome, stands close SE of the fort. The town is fronted by a small craft harbor, which is protected by a breakwater.

Vessels can anchor in the bay about 0.7 mile N of Ras Mirbat, sheltered from winds except those from between S and W, in depths of 12 to 14m.

Jabal Ali, a conspicuous hill, is 116m high and rises about 1.4 miles NNE of Ras Mirbat. A prominent radio mast stands close SSW of the summit.

Jabal Dawan, 1,136m high, rises 5.5 miles N of Ras Mirbat and is the best landmark in this area.

A cone-shaped peak rises about 8 miles E of Jabal Dawan and near the E end of the same part of the range. This peak is conspicuous, but it is not as high as the rest of the range.

Caution.—It was reported that a current sets NNW toward the shore at a rate of 1.5 knots in the vicinity of Ras Mirbat.

A prohibited area, the limits of which may best be seen on the chart, fronts the town of Salalah and extends up to 2 miles seaward.

9.24 Between Ras Mirbat and Ras Naws, 39 miles ENE, the low, rocky coast is backed by a low, barren plain, with a few hills of moderate height.

Bandar Qinqari (17°00'N., 55°00'E.), 19 miles E of Ras Mirbat, provides anchorage to small vessels with local knowledge, in depths of 14 to 29m, rock and sand. This bay provides shelter from NE and E winds.

Jabal Qinqari (17°02'N., 55°01'E.), rising on the N side of Bandar Qinqari and 1 mile inland, is a conspicuous conical hill, 522m high.

Jabal Musayrah (Jabal Musaira), 660m high and conspicuous, stands close to the coast about 14 miles NE of Jabal Qinqari.

Ras Naws (Ras an Nuss) (17°15'N., 55°19'E.), located about 21 miles NE of Bandar Qinqari, is low, rocky and prominent.

A prominent radio mast is reported (1998) to stand about 2.5 miles WNW of this point.

Jabal Naws (Jabal an Nuss) (17°14'N., 55°17'E.), rising about 6 miles NE of Jabal Musayrah, forms the E extremity of Jabal Samhan range. This hill is wedge-shaped and its tallest and most precipitous part, which appears like a bluff, stands closest to the sea and attains a height of 894m. This peak is higher and more conspicuous than Jabal Musayrah, especially when viewed from E.

9.25 Jazair Khuriya Muriya (Kuria Muria Islands) (17°30'N., 56°00'E.), five in number, consist of Al Hasikiyah, As Sawda, Al Hallaniyah, Qarzawit, and Al Jubaylah. These bold and rocky islands, which rise to regular conical peaks, lie parallel to the N shore of Khalij Khuriya Muriya and about 22 miles S.

The tidal current S of these islands sets E during the flood, while N of the islands the current sets W.

Al Hasikiyah (17°27'N., 55°37'E.), lying 21 miles NE of Ras Naws, is the westernmost of the group. It is rocky, barren, and colored white by guano. Two conical peaks standing at its S end rise to heights of 155m. Two small bays indent the E side of the island. A rocky shoal, which dries, lies about 0.5 mile off the NW side.

As Sawda (17°29'N., 55°51'E.), lying about 13 miles E of Al Hasikiyah, slopes irregularly to the coasts from its summit, 399m high, near the middle of the island. This island is barren, except for some grass and moss near the summit. Many small reef-fringed points extend from the shore and form coves suitable for use by small craft with local knowledge. The island is fronted by foul ground and is radar conspicuous.

Al Hallaniyah (17°30'N., 56°02'E.), lying about 5 miles E of As Sawda, is generally rugged and barren, except for some tamarisks trees and a little grass on its E side. The middle part of the island rises to granite chimney peaks standing close together. The tallest peak rises to a height of about 495m. The island is radar conspicuous.

The E and W ends of the island terminate in comparatively low points. Ras al Hallaniyah, the summit and N end of the island, is a bold projecting bluff, 501m high. The coast up to 1 mile on either side of this bluff consists of an almost vertical cliff. The island is fringed by foul ground and shallow rocks lie within 2.5 miles W of its W end.

A shoal patch, with a depth of 18m, was reported (1958) to lie about 5 miles E of Ras Sayyir, the E extremity.

Shoal patches, with depths of 16.5m, 15m, and 14.9m, lie about 2 miles NNW, 3 miles NNE, and 3.5 miles NE, respectively, of Ras al Hallaniyah, the N extremity.

The best anchorage off Al Hallaniyah is in depths of 14.6 to 22m, about 4 miles WSW of the N extremity of the island and about 0.5 mile off a small sandy cove. This anchorage is open to winds from E through N to W. A vessel reported approaching this anchorage on a course of 150°, with the bottom shelving gradually.

A stranded wreck lies in the vicinity of a bay on the NE side of the island.

9.26 Qarzewit (17°36'N., 56°09'E.), lying about 6 miles NW of Ras al Hallaniyah, is rocky and has a double peak, 70 m high. The base of this islet consists of four red granite rocks lying close together. The islet is fringed by foul ground and two above-water rocks lie close together off its E end.

Al Jubaylah (Qibliyah) (17°30'N., 56°20'E.), the easternmost island of the group, lies 13 miles E of Al Hallaniyah and is radar conspicuous. This rocky, barren island is topped by several limestone peaks. A small sandy bay indents the NW side of the island. The tallest peak rises to a height of 168m and is visible from all directions.

Four Peaked Rock (17°29'N., 56°20'E.), about 30m high, lies 1 mile NNW of the NW extremity of Al Jubaylah; the intervening channel has depths of 3.7 to 5.5m. A rocky ledge, marked by some above-water rocks, extends about 0.5 mile NW from Four Peaked Rock.

Well Rock (17°29'N., 56°19'E.), a small above-water danger, lies about 0.5 mile SSW of the SW extremity of Al Jubaylah.

Tilly Rock (17°30'N., 56°25'E.), with a depth of 5.5m, lies about 2 miles E of Al Jubaylah. A small drying rock, over which the sea usually breaks, lies about 2 miles farther E. Four Peaked Rock, well open N of Al Jubaylah and bearing less than 280°, leads N of these rocks.

A wide berth should be given these rocks when a vessel is rounding the E side of the island at night, as they are steep-to and the depths around them are irregular.

Anchorage can be taken off the N side of Al Jubaylah. As the holding ground of coral is indifferent, a long scope of chain is required.

Small vessels with local knowledge can anchor, in a depth of 22m, off the S side of Al Jubaylah with Well Rock bearing 248° and the W extremity of the island bearing 293°.

9.27 Khalij Khuriya Muriya (Kuria Muriya Bay) (17°39'N., 55°53'E.), entered between Ras Naws and Ras Sharbithat, 71 miles NE, is bordered by lines of limestone cliffs and sandy beaches. The depths in the central part of the bay range from 36 to 86m, shoaling gradually toward the coast and the five previously-described islands. The bottom is generally sand and coral, but occasionally rock is found.

Winds—Weather.—The winds and weather in the bay appear more violent and variable than anywhere along this coast. The N wind is strong. Changes of wind may be sudden and without any warning. In the vicinity of this bay, the Southwest Monsoon is reported to set in with heavy squalls, rain, and thunderstorms. During this period, many of the local vessels do not sail. The larger craft sail in early June, after the first burst of the monsoon, and at the end of August, when the monsoon is considered to be over.

Bandar Naws (17°15'N., 55°19'E.), entered between Ras Naws and a low, rocky point about 3 miles to the N, provides sheltered anchorage from S and W winds, in a depth of 16.5m, about 0.5 mile offshore. A village stands at the head of this bay. A tomb, in ruins, stands in a valley about 5 miles N of Ras Naws and 1 mile inland.

Ras Hasik (17°23'N., 55°20'E.), about 10 miles NNE of Ras Naws, is small, low, and rocky. The coast in this vicinity is very

striking. The unbroken limestone mountains with the sharp peaks of the granite ranges are very prominent. Though the coast appears barren from seaward, the valleys are well-wooded and watered.

Bandar Hasik (17°24'N., 55°20'E.), on the N side of Ras Hasik, provides sheltered anchorage from S winds to small vessels with local knowledge, in depths of 9 to 22m, close offshore. A village stands in a valley a short distance from the head of this bay.

9.28 Ghubbat ad Dawm (17°30'N., 55°20'E.) is entered between Ras Hasik and Ras Muntajib, about 18 miles NNE. The coast between Ras Hasik and Ras Tiharr, a low sandy point about 4 miles NNW, is irregular.

The remaining part of the coast is backed by a high, steep tableland with three conspicuous valleys. A sandy spot lies close N of Ras Attabarran, about 8 miles NNW of Ras Tiharr.

A valley, fronted by a sandy cove about 2 miles NNW of Ras Hasik, is reported to extend quite a distance W.

Ras Muntajib (17°39'N., 55°24'E.), a bluff headland with a rugged peak about 2 miles N of it, stands 8 miles NE of Ras Attabarran. The peak is difficult to identify.

The coast NE of Ras Muntajib consists of steep cliffs for a distance of 8 miles. The high land then recedes 2 to 3 miles inland and parallels the coast to the **Dark Point of Shuwaymiyah** (17°54'N., 55°45'E.), located 22 miles NE of Ras Muntajib, where it again approaches the coast. A white stone building stands about 4 miles WNW of the Dark Point of Shuwaymiyah.

Bandar Qanawt, an abandoned fishing village, stands 8.5 mile NNE of Ras Muntajib. A prominent white sandhill is piled up against the cliff at its W end.

The village of Shuwamiyah, with a prominent minaret at its W end, stands 12 miles ENE of Bandar Qanawt.

A conspicuous stranded wreck fronts the shore 5 miles ENE of Bandar Qanawt.

The coast from the Dark Point of Shuwaymiyah, a bluff headland which should not be confused with **Ras Mutaykaf** (Ras ash Shuwaymiyah) (17°54'N., 55°54'E.), about 10 miles E, is an unbroken line of cliffs which form the sea front of a tableland, 183 to 224m high. This line of cliffs extends about 26 miles E from the Dark Point of Shuwaymiyah.

There are overfalls between the latter point and Ras Mutaykaf. A vessel anchored, in a depth of 20m, about 0.5 mile offshore, with the Dark Point of Shuwaymiyah bearing 082°, distant 3 miles. Between this position and the shore, the depths decrease rapidly; overfalls are also located off this section of the coast.

9.29 Ras Minji (17°53'N., 56°05'E.), located about 13 miles E of Ras Mutaykaf, is a small projecting bluff, 213m high.

About 2 miles E of Ras Minji, the cliffs gradually decrease in height for about 2 miles and terminate about 1 mile inland. The cliffs begin to rise again about 7 miles to the E.

Ras Sharbithat (17°53'N., 56°18'E.), the NE entrance point of Khalij Khuriya Muriya, is a steep bluff with a flat top, with a deep notch in its face. It has been reported to be radar conspicuous.

Between Ras Sharbithat and Ras Sawqirah, about 20 miles NE, the coast is bordered by steep limestone cliffs about 180m high. When the sun shines on these cliffs, they appear to be made of clay.

Ras Qarwaw (17°53'N., 56°21'E.), a steep bluff tableland about 244m high, stands 13 miles E of Ras Minji and 3 miles E of Ras Sharbithat. The cliffs W of this point are fronted by a strip of low land, with a small bright red lake at its W end.

A vessel anchored, in a depth of 12.8m, about 6 miles E of Ras Minji and 1 mile offshore. Small vessels with local knowledge can anchor, in depths of 9 to 18m, off the low sandy coast W of Ras Qarwaw.

Funnel Hill (Tower Hill) (18°32'N., 56°29'E.), about 39 miles NNE of Ras Sharbithat and 10 miles inland, is the summit of a high tableland and, although it appears detached when seen from a distance, the tableland extends S to the coast and gradually E for a distance of about 50 miles. This hill has been reported to appear as a light brown sugarloaf against the light background and to be inconspicuous.

Ras Sawqirah (18°08'N., 56°36'E.), a prominent headland, appears as a perfect bluff when viewed from the NE. This headland has been reported to be radar conspicuous.

Ghubbat Sawqirah (18°35'N., 57°16'E.), entered between Ras Sawqirah and Ras Khushayyim, about 88 miles NE, has a low, sandy coast sparsely covered with mangrove bushes.

During the Northeast Monsoon, a heavy swell and surf makes up in the bay and along the coast.

Ruqq al Jazir (18°34'N., 56°51'E.), a shoal with depths of less than 20m and over which there is usually a strong ripple, borders the coast of this bay from a position about 7 miles NNE of Ras Sawqirah to Ras Khushayyim, near the NE entrance point of the bay. The inner part of this shoal dries in places. Less water than charted was reported (1987) in this vicinity.

9.30 Ras Khushayyim (18°58'N., 57°48'E.), located about 3 miles SW of Ras al Madrasah, is a dark, slightly projecting vertical bluff at the S end of a range of flat-topped hills which extends about 11 miles W from Ras al Madrasah. A prominent nipple-shaped feature, formed of eroded sandstone, stands at an elevation of 91m on the summit of a coastal hill near the point. This feature appears especially conspicuous with the sun on it.

Bandar Jazirah (18°57'N., 57°47'E.), bordered by a sandy beach, lies close E of Ras Khushayyim. Small vessels with local knowledge can anchor anywhere within this bay over a bottom of sand and mud.

If the wind shifts and blows hard from the SW, which frequently occurs during the Northeast Monsoon, it is advisable to shift to the anchorage on the N side of Ras al Madrasah.

Ras al Madrasah (19°00'N., 57°51'E.), with a rocky islet lying close NE of it, is a dark cape which appears as an island when viewed from seaward.

When viewed from a distance, the land in the vicinity of the cape appears to be small detached hummocks, but closer in it is seen to be connected with a remarkable circular hummock and the summit of the cape, about 0.2 mile W of its extremity.

Black volcanic peaks, with flat-topped hills about 122m high, stand in the background. Ras al Madrasah has been reported to be radar conspicuous.

During the Southwest Monsoon, good anchorage can be taken, in a depth of 9.4m, coral, with the NE extremity of the islet NE of Ras al Madrasah bearing 181°, distant about 0.5 mile; or in depths of 10 to 11m, about 0.5 mile SSE of this berth.

Smaller vessels with local knowledge can anchor closer in, but a long swell sets in.

Stranded wrecks front the coast about 1.5 and 2.2 miles NNW of Ras al Madrasah.

9.31 Khalij al Masirah (Khalij Masirah) (19°39'N., 58°17'E.), fouled by numerous shoals and banks, is entered between Ras al Madrasah and Ras abu Rasas, the S end of Al Masirah, about 83 miles NE.

Vessels should give this area a wide berth because of the numerous dangers and the strong onshore set sometimes experienced when passing. During strong winds, a heavy swell is experienced in the gulf and the sea breaks over many shoals.

Thick fog, which appears to come down rapidly with a sudden N wind, is prevalent in the vicinity of this gulf during the Northeast Monsoon.

Tides—Currents.—In Khalij al Masirah, the tidal currents set between NNE and NW at a rate of 1.5 knots during the flood and in the opposite direction on the ebb at the same rate.

Outside the 200m curve, the tidal current sets parallel with the coast, but is probably lost in the prevailing current.

Off-lying banks.—**Jazirat Hamar an afur** (19°48'N., 57°49'E.), lying about 47 miles N of Ras al Madrasah and 3 miles offshore, is 99m high, with vertical limestone cliffs. Its summit is flat and split in all directions. Some sunken rocks lie close off both its E and W sides. The passage between this small islet and the coast has depths of about 5 to 11m in the fairway and is free of known dangers.

Shib Kadun (San Carlos Banks) (19°29'N., 58°00'E.), which consists of several coral banks with sunken rocks on them, extends about 18 miles NE from a position about 21 miles N of Ras al Madrasah. A heavy swell breaks over these banks during foul weather.

Shib Bu Sayfah (19°56'N., 58°15'E.) extends about 11 miles N and NE from a position about 23 miles E of Jazirat Hamar an Nafur. Rocks, with depths of less than 1.8m, lie near the edge of this reef.

Shib al Ghubab (20°11'N., 58°00'E.), which breaks, lies about 26 miles NNE of Jazirat Hamar an Nafur and 6 miles offshore. Depths of less than 1.8m exist over this reef.

A reef, with depths of less than 1.8m, lies about midway between this reef and Shib Bu Sayfah. A similar reef lies about 18 miles NNE of Jazirat Hamar an Nafur and 7 miles offshore.

9.32 The coast between Ras al Madrasah and Ras ad Dil, about 5 miles to the N, is sandy and backed by hills.

Ras ad Dil (19°06'N., 57°50'E.), a small rocky projection 143m high, is the S limit of a uniform line of tableland which extends about 34 miles N to Ras ad Duqm (Ras Duqm). This tableland descends to the coast in vertical cliffs from 70 to 146m high.

A small bight is entered between Ras Markaz, about 5 miles N of Ras ad Dil, and Ras Khaysat ai Liyukh, about 3 miles farther NW. The latter point is a bluff which is difficult to make out until close to it.

Vessels with local knowledge can anchor in this bight, in depths of 11 to 12.8m, sand, sheltered from S and SW winds.

A isolated shoal, with a depth of 16.5m is reported (1975) to lie (position approximate) about 26 miles NE of Ras ad Dil.

A dangerous wreck is reported to lie (position approximate) about 7 miles SE of Ras ad Duqm.

Ghubbat Quwayrat (19°41'N., 57°44'E.), entered between Ras ad Duqm and a low rocky point, with two rocky islets close off it, about 10 miles N, is clear of dangers. It provides anchorage to small craft with local knowledge close NW of Ras ad Duqm.

Sheltered anchorage is provided from SW winds. A low peninsula, easily identified by a small mound at its N end, extends N from Ras ad Duqm.

The coast between the N entrance of Ghubbat Quwayrat and Ras Sidarah, about 4 miles to the N is alternately sandy and cliffy. A village and a grove of trees stand on the latter point, which is low and inconspicuous.

Several groups of conical hills stand close inland of Ras Sidarah.

Ras Nakharir (19°58'N., 57°49'E.), about 5 miles N of Ras Sidarah, is a steep bluff rising to a height of 142m. The coast up to 2 miles S of this bluff is cliffy.

The coast between Ras Nakharir and Ras Sirab, about 12 miles N, consists of sandy beach backed by a range of high hills.

A village stands on Ras Sirab, which is low, sandy, and inconspicuous. Ghubbat Sirab, a slight indentation, lies between Ras Sirab and Ras Bintawt (Ras Bintut), about 13 miles NE. A rock, with less than 1.8m, lies about 0.3 mile ENE of Ras Bintawt.

Jabal ash Shubatayn (Jabal ash Shabatayn) (20°18'N., 57°43'E.), a 123m high, conspicuous peak, stands about 9 miles W of Ras Bintant.

Ghubbat Bintawt (Ghubbat Bintut) (20°22'N., 58°02'E.), entered between Ras Bintawt and Ras Abana, a low rocky point about 9 miles NE, is bordered by sandy beach and is free of known dangers. A low range of hills, which rises from Ras Abana, extends to the WSW.

9.33 Ghubbat Hashish (20°30'N., 58°10'E.) is entered between Ras Abana and Ras ash Shajarat, about 8 miles E. The low, sandy shores of the bay are backed by a low range of hills on the W side. A pyramidal hill, 37m high, stands about 2 miles N of Ras Abana.

The mud-fringed head of the bay is divided into two parts by a spit which extends about 7 miles to the S. Three small rocky islets stand on this spit. A small village stands on the middle islet. A small rocky patch, with a depth of less than 1.8m, lies about 2 miles ESE of Ras Abana.

During the flood within the bay, the tidal current sets NNW at a rate of 0.7 knot and in the opposite direction, during the ebb, at the same rate.

A vessel has anchored, in a depth of 12.8m, with Abb, a rocky islet lying at the S end of the above spit, bearing 097°

and Raqq, a rocky islet lying about 5 miles NNW, bearing 007°.

A vessel anchored, in a depth of 8.5m, with Abb bearing 137°. This anchorage was approached with the E extremity of Ras Abana bearing 336°, and when Raqq, the rocky islet about 5 miles NNW of Abb, bore 005°, course was altered for the anchorage. From this anchorage, the rocks SW of Mahawt were about 0.5 mile distant and clearly visible.

Barr al Hikman (20°30'N., 58°24'E.), the peninsula lying between Ghubbat Hashish and Al Masirah, the island located to the E, is very low, sandy, and brush-covered. A lagoon, reported to be nonexistent, lies about 1 mile N of the S end of the peninsula.

Kinasat Hikman, a shoal with depths of less than 5.5m, extends up to 6 miles off the S end of Barr al Hikman. Several patches, with depths of less than 11m, lie within 11 miles S of the peninsula. There are occasional overfalls between Kinasat Hikman and Shib Bu Sayfah, to the S.

9.34 Al Masirah (20°26'N., 58°48'E.), lying centered about 12 miles off the E side of Barr al Hikman, is generally hilly, especially on its E side. The hills along the E side of the island are separated from the island coast by a narrow sandy plain; they run nearly its entire length. Al Masirah has been reported to be radar conspicuous.

A steep plateau stands in the middle of the range on the NE side of the island. Along the W side of the island, between its S end and a position about 7 miles from its N end, there are a few low hills separated from the E range by an extensive sandy plain marked by several hillocks.

The climate of the island is agreeable and healthy between November and March, but hot and unhealthy during the SE monsoon.

Jabal Madrub (20°33'N., 58°53'E.), 256m high and conspicuous when viewed from the N or NE, stands about 8 miles S of the N end of the island.

Ras Abu Rasas (20°10'N., 58°39'E.), the S extremity of Al Masirah, is low and rocky. Jabal Suwayr (Jabal al Hilm), a conspicuous conical hill, rises to a height of 153m, about 2 miles NNE of Ras Abu Rasas.

Ras Kaydah (20°17'N., 58°47'E.), small and rocky, has a conspicuous, conical hill about 20m high nearby. When viewed from the E, this hill shows two peaks. A shoal, with a least depth of 4.9m, lies about 2 miles E of Ras Kaydah. The sea breaks heavily on this shoal with the slightest swell but when the sea is smooth there is no indication of shoal water.

Islets, which dry, exist respectively, 0.4 mile E, and 0.2 mile offshore 2.5 miles N of Ras Kaydah.

The coast between Ras Kaydah and Ras Zafaranat, about 17 miles NE, is regular with a few small rounded projections and a low rocky beach. Haql (Hakkan), a small village in a grove of trees, lies close to the shore about 5 miles N of Ras Kaydah.

Ras Zafaranat (20°30'N., 58°58'E.) is rocky with hills rising abruptly.

Caution.—Shoal water, which breaks in calm weather, extends up to 3 miles WSW and ESE of Ras Abu Rasas, and up to about 2 miles off the coast between it and Ras Kaydah.

Isolated pinnacle rocks, with depths of as little as 5.5m, have been reported to lie up to 10 miles WSW of Ras Abu Rasas.

Uncharted coral heads lie within the 10m depth contour. Several wrecks are charted in the vicinity of Ras Abu Rasas.

Between Ras Abu Rasas and Ras Kaydah, about 11 miles NE, the coast is indented by small, sandy bays fringed by rocks.

9.35 Ras al Ya (20°31'N., 58°59'E.), about 2 miles NE of Ras Zafaranat, is the E extremity of the island and consists of a prominent bluff rising to a ridge of hills which extend W to the middle of the island.

A conspicuous peak, 99m high, stands about 2 miles WNW of Ras al Ya. Jabal Madrub rises about 3 miles farther WNW. A rock, which dries, lies about 0.3 mile offshore about 0.5 mile SSW of Ras al Ya.

Ras al Jazirah (20°34'N., 58°57'E.), about 4 miles NNW of Ras al Ya, is rocky and well-marked by a black patch on its S side. A sharp peak, rising to a height of 95m, stands about 2 miles W of this point.

A 9.4m patch lies about 2 miles SE of Ras al Jazirah. Jazirat Thukhayr, a sandy islet close N of Ras al Jazirah, lies on a drying reef connected to the shore.

Drying rocks extend up to 0.2 mile off the E extremity of the islet. The coast between Ras al Jazirah and Ras Qudufah, the NE extremity of the island, about 7 miles NNW, is indented by a bay and is fringed by shoals, with depths of less than 10m, which extend up to 2 miles offshore in places.

A 4.6m rocky patch with a rock, awash, on its SW side, lies inside the 10m curve, about 3 miles NNW of Ras al Jazirah. The sea breaks on this patch and rock with a moderate swell.

A 3.7m patch,, and a 10m patch lie,, 0.8 mile NNW and 1.5 miles NE, respectively, of the rock.

Ras Qudufah (20°41'N., 58°55'E.), consisting of two rocky projections about 0.5 mile apart, rises to Jabal al Jidufa, about 64m high, a short distance inland.

The reef bordering this point extends about 0.5 mile offshore. Depths of less than 5.5m lie within about 0.5 mile of the point. A cairn stands on a hill close S of Jabal al Jidufa.

A small monument stands close SW of Ras Qudufah; see [paragaph 9.42](#) for more landmarks in this vicinity.

Khawr al Masirah (Masirah Channel)

9.36 Khawr al Masirah (20°30'N., 58°40'E.), lying between the W side of Al Masirah and the mainland coast, is used by small vessels with local knowledge. The channel is fouled by numerous dangers.

The tidal currents in the S entrance set N with the flood and S during the ebb, attaining rates at springs of up to 3 knots. Off the N entrance, the N current can reach 3 knots, while the S current can reach 2 knots.

At a position about 1.5 miles N of Ras Qudufah, the current sets predominantly WNW and ESE, at a rate which can exceed 2 knots at springs.

The S entrance of Khawr al Masirah is preferable at all times because it is much wider and deeper than the N entrance and most of the dangers are charted.

The channel leads NNE for a distance of 11.5 miles from a position about 7 miles WSW of Ras Abu Rasas and then closely follows the coast of the islands about 2 miles offshore.

A least depth of 7m exists in the channel about 3 miles SSW of Ras Kalban.

On the E side of the channel, between Ras Abu Rasas and **Ras Kalban** (20°21'N., 58°38'E.), about 11 miles to the N, the coast is low and sandy. Several sandy bays, fringed by rocks, lie along this section of coast. Numerous shoals, with depths of 1.2 to 24m, lie within 4 miles WSW through W of Ras Abu Rasas.

Shib Matrah (20°09'N., 58°38'E.), with depths of less than 1.8m, lies about 2 miles WSW of Ras Abu Rasas. Shib Abu Rasas, over which the sea breaks, lies about 0.5 mile SW of Ras Abu Rasas and dries 0.9m. Shoals, with depths of less than 5.5m fringe, the coast N of Ras Abu Rasas and lie as far as 5 miles offshore about 3 miles N of Ras Abu Rasas.

Two above-water rocks lie on this shoal, about 2 miles N of Ras Abu Rasas and close offshore. Banat Murshid, an above-water rock with some sunken rocks close SW and W, lies close offshore about 2 miles farther NNW. The sea breaks over these sunken rocks, except in a flat calm. Good anchorage can be taken by small vessels with local knowledge, in depths of 8.2 to 11m, almost 0.5 mile SE of Banat Murshid.

Uncharted coral heads exist within the 5.5m depth contour on both sides of the channel in this vicinity. Shib Sanfar, with dries 0.3m and on which the sea usually breaks, lies about 4 miles NW of Ras Abu Rasas; a 4m patch lies 1 mile SW of Shib Sanfar. Detached 3.4 to 4m patches lie about 1 mile WSW of Ras Kalban.

On the W side of the channel a patch, with depths of 4.9 to 10.7m, lies about 6 miles NW of Ras Abu Rasas. The coast between Ras Kalban and the S entrance of a bight, about 7 miles NE, is rocky and irregular with some projecting points.

A rocky bank, with depths of 1.8 to 3.7m and some sunken rocks, extends up to 1 mile off this coast.

A dangerous wreck is reported (position doubtful) to lie about 16 miles SW of Ras Abu Rasis.

9.37 Jabal Khiran (20°22'N., 58°41'E.), a double-peaked hill 105m high, stands 3.5 miles NE of Ras Kalban; this hill is not easily identified from S.

On the W side of Khawr al Masirah, the coast between **Ras al Mishayu** (20°21'N., 58°27'E.) and Ras an Nujdah, about 29 miles NE, is low and rocky, with intermediate sandy patches for the first 14 miles; the coast is then low and sandy, with scattered breaks along the remaining part.

Bayad Dimnah, the greater part of which dries, extends from the mainland between a position about 10 miles NE of Ras al Mishayu to Ras an Nujdah; this reef extends up to 5 miles offshore. Jazirat Maawil, low and wooded, stands close offshore. about 3 miles SSW of Ras an Nujdah.

A shoal, with depths of less than 5.5m, extends irregularly S from the S part of Bayad Dimnah and gradually narrows until it terminates about 3 miles NNW of Ras Kalban. Several islets and dangers lie S of the end of this shoal.

Jazirat Umm al Kids, the S of these islets, lies about 2 miles WNW of Ras Kalban. This islet appears like a patch of sand from the SW. A cairn, about 2.4m high and visible for about 8 miles, stands on Jazirat Umm al Kids.

Jazirat al Har and Jazirat Sinfah stand about 1 mile NW and 2.5 miles NNE of Jazirat Umm al Kids. Overfalls occasionally mark the numerous drying rocks in the vicinity.

A shoal, with a least depth of 2.1m, lies in the main channel about 2 miles NE of Jazirat Sifah.

9.38 The coast between a point about 7 miles NE of Ras Kalban and Ras Shaghaf, about 7 miles farther NE, forms a bight which is almost filled by a drying bank extending about 5 miles NNE from the S shore of the bight.

Jazirat Shaghaf, low and sandy and covered with scrub and low bushes, stands on this drying bank. An inlet, 1.8 to 5.5m deep and 0.2 to 0.4 mile wide, leads in between the bank and the E shore of this bight to Umm Rasas.

A shoal, with a depth of less than 0.9m, was reported to extend about 0.3 mile WNW from the shore at Umm Rasas, but a small sandy beach close S of this village provides good landing. Umm Rasas consists of a few stone houses and huts, and a ruined tower.

Jabal Safaiq (20°28'N., 58°48'E.), a flat-topped conical hill, 55m high, stands 1.5 miles S of Umm Rasas. This hill shows up well from W. Small vessels with local knowledge can anchor, in a depth of 5.5m, N of Jazirat Shaghaf, with the ruined tower bearing 142° and Jabal Khiran bearing 207°.

There are depths of about 7.3 to 8.2m a little bit farther offshore.

Anchorage can also be taken, in depths of 7.3 to 9.1m, from 1 to 1.5 miles W of Ras Shaghaf.

The coast between Ras Shaghaf and Ras Hilf, about 11 miles NNE, is bordered by a narrow reef which extends up to 0.7 mile offshore.

Dawwah (20°33'N., 58°48'E.), the principal village on Al Masirah, stands in a grove of trees about 3 miles NNE of Ras Shaghaf and close inland.

Anchorage can be taken, in a depth of 5.5m, close offshore, with the trees close N of Dawwah bearing 112°. Two other villages stand between Dawwah and Ras Hilf.

9.39 Bayad Bin Juwaysim (20°37'N., 58°47'E.), a reef which almost completely dries, lies on the W side of the channel and extends about 5 miles NE from a position about 5 miles NW of Ras Shaghaf Jazirat. Bin Juwaysim stands on the SE side of this reef.

Small vessels with local knowledge can pass on either side of Bayad Bin Juwaysim, but there are several patches with depths of 3.7m in the vicinity of the reef **Kinasat Hilf** (20°41'N., 58°50'E.), partially drying, lies on a sandbank about 2 miles W of Ras Hilf. Foul rocky ground extends up to 2 miles offshore S of Ras Hilf.

Directions.—A vessel from S or SW should steer for a position about 7 miles 245° from Ras Abu Rasas; when Ras Kalban bears 024°, it should be steered for on that bearing. Maintain this course until the cairn on Jazirat Umm al Kids bears 008°, and then steer for the cairn on this bearing. This course passes over a 7m patch.

When Jabal Kairan bears 064.5°, steer for it on that bearing until Jazirat Sifah bears 008°. This course of 008° should be maintained until the cairn on Jazirat Umm al Kids bears 219.5°. Course then can be altered to 039.5° with the cairn on Jazirat Umm al Kids bearing 219.5° astern.

This course leads SE of the 2.1m patch NE of Jazirat Sifah. When this patch has been cleared, course should be altered to

about 035°, when Jabal Kairan bears 146°, which leads to the anchorage off Dawwah.

The channel W of Ras Shaghaf divides, passing E and W of Bayadh Bin Juwaysim, and between Ras Hilf and Kinasat Hilf.

The N entrance of Khawr al Masirah is not recommended for vessels. This channel should not be attempted during the Northeast Monsoon, or in foul weather, because the sea breaks heavily on the foul ground off the entrance.

9.40 The coast between Ras Qudufah and Ras Hilf, about 3 miles W, is fringed by a reef; shoals, with depths of less than 5.5m, extend up to 0.5 mile offshore along this part of the coast.

Island Reef (20°42'N., 58°53'E.), which dries 2.2m, lies about 1 mile NE of Ras Hilf; the sea breaks over this reef with a moderate swell. A dangerous wreck, awash at HW, lies close NE of the reef. Several shoal patches, with depths ranging from 3.2 to 5m, lie NE and NW of Island Reef, and are best seen on the chart.

Ras Hilf (20°41'N., 58°52'E.) is low and sandy. It has been reported that a bank, with depths of less than 1.8m fronts the W side of the point. Considerable shoaling occurs off this point, accompanied by rapid changes in the coastline.

A jetty extends about 0.1 mile W from a position about 0.15 mile S of Ras Hilf.

A tanker mooring buoy berth, connected to the shore by a submarine pipeline, lies about 2 miles NNW of Ras Qudufah.

A conspicuous tank farm stands on Ras Hilf. Several radio masts stand about 2 miles ESE of Ras Hilf; a conspicuous building with an aluminum roof stands about 2 miles ESE of the same point.

An airfield hangar stands 1.5 miles SSE of Ras Hilf; close NE is an airfield and a wind sock.

Jabal Hilf (20°39'N., 58°53'E.), about 65m high, stands about 0.5 mile SW of the hangar. Two conspicuous radar scanners stand close N of the summit.

No pilots are available but a marine officer from the air station will board vessels on request to advise on local conditions.

Anchorage can be taken, in charted depths of 11m, about 0.5 mile WSW of Ras Hilf, and in a depth of 7.3m about 0.5 mile farther E; the bottom is sand over coral. Caution should be exercised in anchoring, as the holding ground at both anchorages is poor, and the tidal currents are strong.

Directions.—Vessels bound for the inner anchorage WSW of Ras Hilf should not enter without local knowledge. The N approach, which is marked by lighted buoys with radar reflectors, is not recommended for vessels with a draft exceeding 4m.

9.41 Ras ar Ruways (Ras ar Ruays) (20°59'N., 58°50'E.) lies about 13 miles NNE of Ras an Nujdah. The intervening coast is low, sandy, and bush-covered.

An area of foul ground, on which the sea breaks heavily during the Northeast Monsoon and in bad weather, extends from Al Masirah to Ras ar Ruways.

The coast from Ras ar Ruways to **Ras Jibsh** (21°28'N., 59°22'E.), about 43 miles NE, is fronted by cliffs for the first 13 miles and then continues as low sand dunes.

A few villages stand along this section of coast; a 26m patch has been reported to lie about 10 miles ESE of Ras Jibsh.

The low, sandy coast between Ras Jibsh and Ras al Khabbah, about 53 miles NNE, has a barren aspect. In the interior there are numerous date groves and areas of cultivation.

Jabal Jalan (22°11'N., 59°22'E.) is 1,234m high, wedge-shaped, and conspicuous. Jabal al Kharmis, 884m high, dark and rugged, stands about 14 miles N of Jabal Jalan. Jabal Kalhat, the SE extremity of a range over 1,372m high, stands about 7 miles NNW of Jabal al Kharmis.

Jabal Jifan (21°46'N., 59°24'E.), one of several isolated hills along this section of coast, stands 18 miles NNE of Ras Jibsh and has a rounded form.

Jabal Siyh (21°54'N., 59°24'E.), about 8 miles N of Jabal Jifan, is an oblong black hill about 305m high; on a WSW bearing this hill is saddle-shaped. Jabal Quarari (Haycock), a hill about 3 miles NE of Jabal Siyh, is conical.

A 30m high hill, close W of Ras Jibsh, is almost covered by white sand, but three small dark peaks are visible. A small village stands on the SW slope of this hill. Jabal Jalan, about 25 miles W of Ras al Khabbah, is visible from this vicinity and appears wedge-shaped.

9.42 Al Ashkarah (21°52'N., 59°35'E.), about 27 miles NNE of Ras Jibsh, is a small village composed of numerous stone houses, huts, and a fort. Jabal Siyah is a good mark for approaching this village.

Anchorage can be taken, in a depth of 12.8m, about 1 mile off the shore of a small sandy bay. The S entrance point of this bay lies E of Al Ashkarah and is low and rocky. The depths are regular but the color of the water is very changeable in this locality.

Ras Qumaylah (21°59'N., 59°40'E.), low, sandy, and backed by a ridge of low hills, stands about 9 miles NE of Al Ashkarah. Jabal Qumaylah, one of these hills about 5 miles SW of Ras Qumaylah, appears conical with a cleft peak when viewed from the S, but later it is seen as two hills close together; it is not easily made out from the NE. The entrance of Khawr Bani Bu Ali, about 6 miles N of Ras Qumaylah, is blocked by a large black rock.

Al Suwayh (22°06'N., 59°42'E.), a village of mud huts about 1 mile NNE of Khawr Bani Bu Ali, is only inhabited during the Northeast Monsoon.

Ras ar Ruays (22°11'N., 59°46'E.), about 7 miles NE of Al Suwayh, is low and rocky, with a few sandy hillocks. The coast from 2 to 4 miles S of this point is bordered by a coral bank, with a least depth of 5.5m, which extends up to 2 miles offshore. Overfalls occur over this bank.

Fairly well-sheltered anchorage from N winds can be taken, in a depth of 11m, about 1 mile NE of Ras ar Ruays. A conspicuous stranded wreck lies close S of the point.

Ras ar Khabbah (22°14'N., 59°48'E.), located about 3 miles NNE of Ras ar Ruays, is low, rocky, and radar conspicuous.

The coast between Ras al Khabbah and Ras al Hadd, about 18 miles to the N, is fronted by cliffs extending up to 3 miles from the latter point, where it becomes low and sandy.

There is a conspicuous break in the cliffs about 7 miles N of Ras al Khabbah. During the monsoons, when it is hazy, it is reported that these cliffs cannot be seen until about 2 miles off.

The first thing to be seen is the white line of the surf breaking at their foot. This coast is fairly steep-to and no anchorage is available.

9.43 Ras al Junayz (22°27'N., 59°50'E.), the E extremity of the Arabian peninsula, is located about 12 miles N of Ras al Khabbah and formed by a low cliff.

A shoal patch, with a depth of 10m, was reported to lie about 1 mile ENE of Ras al Junayz.

A dangerous wreck was reported to lie (position approximate) about 2 miles NNE of Ras al Junayz and 0.8 mile offshore.

Jabal Saffan (22°24'N., 59°49'E.), which rises 250m to North Peak and 283m to South Peak, stands SW of Ras al Junayz. These two peaks stand about 2 miles apart and are good marks for identifying Ras al Hadd and Ras al Junayz.

A 222m peak stands close S of South Peak. A coastal range, 122 to 152m high, stands NW of Ras al Junayz and 1 mile inland. A gap, which is well-defined from seaward, stands between this range and Jabal Saffan. It has been reported that Jabal Saffan is radar conspicuous.

Ras al Hadd (22°33'N., 59°48'E.), the S entrance point of the Gulf of Oman, is described in [paragraph 11.2](#).

The currents off this point are strong and variable and are generally influenced by the prevailing winds.

From Ras al Madrasah (19°00'N., 57°51'E.) to Ras al Hadd, the current sets N parallel to the coast, usually from April to September, at a rate of about 2 knots.